What is claimed is:

1. A fluid circuit for a hematology analyzer comprising,

a) a block-like plastic member formed with an interior tube-like passageway for conduction of selected fluids along a selected path defined by said passageway to a predetermined location in said block-like plastic member where portions of said selected fluids can be mixed or reacted,

b) a reaction chamber recess at said predetermined location in said block-like plastic member,

c) a detachable metallic heat transfer member positionable across said reaction chamber recess to close said reaction chamber recess and establish a confined reaction chamber,

d) a heater in conductive contact with said heat transfer member for heating said heat transfer member to transfer heat through said heat transfer member to said reaction chamber and any contents of said reaction chamber when said metallic heat transfer member is in the closed position across the reaction chamber recess, and

e) means for detachably securing said metallic heat transfer member in said closed position to said block-like plastic member at said reaction chamber recess.

2. The fluid circuit as claimed in claim 1 wherein the metallic heat transfer member has an outside metal surface in conductive contact with said heater and an opposite inside surface, and wherein the means for detachably securing said heat transfer member in said closed position include fasteners extending through aligned openings in the block-like plastic member and the heat transfer member.

3. The fluid circuit as claimed in claim 2 wherein the fasteners are threaded into the inside surface of said heat transfer member.

4. The fluid circuit as claimed in claim 2 wherein said heat transfer member includes an inside surface recess that aligns with said reaction chamber recess when said heat transfer member is in said closed position.

5. The fluid circuit as claimed in claim 4 wherein said heat transfer member includes a top end surface and a bottom end surface, said heat transfer member further including a first vent passage portion extending from said inside surface recess through said top end surface to communicate with a second vent passage portion in said block-like plastic member, and a first drain passage portion extending from said inside surface recess through said bottom end surface to communicate with a second drain passage portion in said block-like plastic member.

6. The fluid circuit as claimed in claim 4, wherein said inside surface recess has a periphery at said inside surface of said heat transfer member and a gasket is provided at the inside surface of said heat transfer member around the periphery of said inside surface recess to provide a leak tight seal between the inside surface recess and the reaction chamber recess when the heat transfer member is in said closed position.

7. The fluid circuit as claimed in claim 1 wherein said block-like plastic member has an outside plastic surface and a vestibule is formed in the outside plastic surface, said vestibule having a depth extending from the outside plastic surface to a generally flat planar subsurface, said reaction chamber recess being formed in the subsurface of said vestibule.

8. The fluid circuit as claimed in claim 7 wherein said metallic heat transfer member has an outside metal surface in conductive contact with said heater, and an opposite inside surface formed with an inside surface recess that aligns with said reaction chamber recess when said heat transfer member is in said closed position.

9. The fluid circuit as claimed in claim 8 wherein the means for detachably securing the heat transfer member in said closed position to said block-like plastic member includes fasteners extending through aligned openings in the block-like plastic member and the metallic heat transfer member.

10. The fluid circuit as claimed in claim 9 wherein the fasteners are threaded into the inside surface of said metallic heat transfer member.

11. The fluid circuit as claimed in claim 1 further including means for maintaining said heater in conductive contact with said metallic heat transfer member.

12. The fluid circuit as claimed in claim 11 wherein said metallic heat transfer member has an outside surface in conductive contact with said heater and said heater is a flexible film electric heater and said means for maintaining said heater in conductive contact with said heat transfer member includes a heater engagement member having a heat engagement surface of complementary shape with the outside surface of said heat transfer member and said flexible film electric heater when positioned against the outside surface of said heat transfer member.

13. The fluid circuit as claimed in claim 12 wherein said means for maintaining said heater in conductive contact with said heat transfer member includes means for biasing said heater engagement member against the outside metallic surface of said metallic heat transfer member to urge said heater against said outside metallic surface.

14. The fluid circuit as claimed in claim 13 wherein said biasing means includes a holding member detachably secured to the block-like plastic member and resilient members provided between the holding member and the heater to urge the heater against the outside metal surface of said metallic heat transfer member.

15. The fluid circuit as claimed in claim 14 wherein said resilient members are coil springs that extend from the holding member to the heater through openings in the heater engagement member.

16. The fluid circuit as claimed in claim 1 wherein a gasket is provided between the metallic heat transfer member in said closed position and the block-like plastic member at said reaction chamber recess to provide a leak tight seal between the metallic heat transfer member and the reaction chamber recess.

17. A method of transferring heat to a reaction chamber in a fluid circuit comprising,

a) forming a block-like plastic member of a fluid circuit with a reaction chamber recess at one location in the block-like plastic member,

b) positioning a detachable metallic heat transfer member across the reaction chamber recess in a closed position to close the reaction chamber recess and establish a confined reaction chamber,

c) detachably securing the metallic heat transfer member to the block-like plastic member in the closed position across the reaction chamber recess, and

d) heating an outside surface of the heat transfer member with a heating device in conductive contact with the heat transfer member to transfer heat to the reaction chamber by heat conduction through the heat transfer member when the heat transfer member is in the closed position.

18. The method of claim 17 including forming the outside surface of the detachable metallic heat transfer member with a curved surface.

19. The method of claim 17 including forming the detachable metallic heat transfer member with an inside surface having a recess that aligns with the reaction chamber recess when the metallic heat transfer member is in the closed position.

20. The method of claim 17 further including using detachable fasteners to pass into the metallic heat transfer member from the block-like plastic member to detachably secure the metallic heat transfer member to the block-like plastic member.